ABSTRACT OF THE DISCLOSURE

In a photoelectric converting device, a photoelectric current (electric signal) generated by light entering a photodiode PD causes the gate voltage of MOS transistors T1 and T2 to rise, and thus a current corresponding to this gate voltage flows through the MOS transistor T2 into a capacitor C, shifting the voltage at the node "a" between the MOS transistor T2 and the capacitor C. Here, when the voltage ϕVPS applied to the source of the MOS transistor T1 is adjusted in such a way that the MOS transistor T1 operates in a subthreshold region below its threshold level, the voltage at the node "a" varies on a natural-logarithm basis with respect to the photoelectric current. By contrast, when the voltage ϕVPS applied to the source of the MOS transistor T1 is kept approximately equal to a direct-current voltage VPD, the voltage at the node "a" varies on a linear basis with respect to the photoelectric current.